

CLAIMS

1. A character display apparatus, comprising:
a display device comprising a plurality of pixels;
5 and
a control section for controlling the display device,
wherein each of the plurality of pixels comprises
a plurality of sub-pixels arranged in a predetermined
direction, and at least one of a plurality of color elements
10 is assigned to each of the plurality of sub-pixel;
the control section determines at least one sub-pixel,
to which a basic portion indicating a skeleton of a character
is assigned, among the plurality of sub-pixels in the display
device, based on character shape data indicating character
15 shapes;
a first pixel of the plurality of pixels comprises
a plurality of first sub-pixels;
at least one pixel neighboring the first pixel
comprises a plurality of second sub-pixels;
20 the control section determines an arrangement
pattern containing a plurality of elements, wherein a value
of each of the plurality of elements is determined depending
on whether or not the basic portion is assigned to a
corresponding sub-pixel of the plurality of the first

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sub-pixels and the plurality of the second sub-pixels; and
the control section determines a luminance level of
the first pixel based on the arrangement pattern.

- 5 2. An apparatus according to claim 1, wherein the plurality
of elements include a first element and a second element
neighboring the first element;

 a value of the first element indicates that the basic
portion is assigned to a sub-pixel relating to the first
10 element;

 a value of the second element indicates that the basic
portion is not assigned to a sub-pixel relating to the second
element; and

 the control section determines the luminance level
15 of the first pixel based on another arrangement pattern which
is modified from said arrangement pattern such that a value
of the first element is interchanged with a value of the
second element.

- 20 3. An apparatus according to claim 1, wherein the plurality
of elements include a first element and a second element
neighboring the first element;

 a value of the first element indicates that the basic
portion is assigned to a sub-pixel relating to the first

element;

a value of the second element indicates that the basic portion is not assigned to a sub-pixel relating to the second element; and

5 the control section determines the luminance level of the first pixel based on another arrangement pattern which is modified from said arrangement pattern such that a value of the second element is changed to indicate that the basic pattern is assigned to the sub-pixel relating to the second
10 element.

4. An apparatus according to claim 1, wherein the control section determines the luminance level of the first pixel based on a combination of a color of the character and a
15 background color of the character and the arrangement pattern.

5. An apparatus according to claim 1, wherein the control section compares a combination of a color of the character and a background color of the character with a combination
20 of a predetermined character color and a predetermined background color, and determines the luminance level of the first pixel based on a result of the comparison and the arrangement pattern.

6. A method for displaying a character on a character display apparatus, wherein

the character display apparatus comprises:

5 a display device comprising a plurality of pixels;
and

 a control section for controlling the display device,
 wherein each of the plurality of pixels comprises
a plurality of sub-pixels arranged in a predetermined
10 direction, and at least one of a plurality of color elements
is assigned to each of the plurality of sub-pixel;

 a first pixel of the plurality of pixels comprises
a plurality of first sub-pixels; and

 at least one pixel neighboring the first pixel
15 comprises a plurality of second sub-pixels,

the method comprises the steps of:

 determining at least one sub-pixel, to which a basic
portion indicating a skeleton of a character is assigned,
among the plurality of sub-pixels in the display device,
20 based on character shape data indicating character shapes;

 determining an arrangement pattern containing a
plurality of elements, wherein a value of each of the plurality
of elements is determined depending on whether or not the
basic portion is assigned to a corresponding sub-pixel of

the plurality of the first sub-pixels and the plurality of the second sub-pixels; and

determining a luminance level of the first pixel based on the arrangement pattern.

5

7. A program for causing a character display apparatus to execute a character display process, wherein

the character display apparatus comprises:

a display device comprising a plurality of pixels;

10 and

a control section for controlling the display device,

wherein each of the plurality of pixels comprises a plurality of sub-pixels arranged in a predetermined direction, and at least one of a plurality of color elements

15 is assigned to each of the plurality of sub-pixel;

a first pixel of the plurality of pixels comprises a plurality of first sub-pixels; and

at least one pixel neighboring the first pixel comprises a plurality of second sub-pixels, and

20 the character display process comprises the steps of:

determining at least one sub-pixel, to which a basic portion indicating a skeleton of a character is assigned, among the plurality of sub-pixels in the display device, based on character shape data indicating character shapes;

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determining an arrangement pattern containing a plurality of elements, wherein a value of each of the plurality of elements is determined depending on whether or not the basic portion is assigned to a corresponding sub-pixel of the plurality of the first sub-pixels and the plurality of the second sub-pixels; and

determining a luminance level of the first pixel based on the arrangement pattern.

8. A recording medium storing a program for causing a character display apparatus to execute a character display process, wherein the recording medium is readable by the character display apparatus,

the character display apparatus comprises:

a display device comprising a plurality of pixels; and

a control section for controlling the display device, wherein each of the plurality of pixels comprises a plurality of sub-pixels arranged in a predetermined direction, and at least one of a plurality of color elements is assigned to each of the plurality of sub-pixel;

a first pixel of the plurality of pixels comprises a plurality of first sub-pixels; and

at least one pixel neighboring the first pixel

comprises a plurality of second sub-pixels, and

the character display process comprises the steps of:

determining at least one sub-pixel, to which a basic
portion indicating a skeleton of a character is assigned,

5 among the plurality of sub-pixels in the display device,
based on character shape data indicating character shapes;

determining an arrangement pattern containing a
plurality of elements, wherein a value of each of the plurality
of elements is determined depending on whether or not the
10 basic portion is assigned to a corresponding sub-pixel of
the plurality of the first sub-pixels and the plurality of
the second sub-pixels; and

determining a luminance level of the first pixel based
on the arrangement pattern.

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